

## KERN COMMUNITY COLLEGE DISTRICT

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### **CLASS TITLE: Senior Network Engineer**

#### **BASIC FUNCTION:**

Under the direction of the Assistant Director of Information Technology, provide technical leadership, coordination and planning in support of KCCD's Networking (LAN and WAN) infrastructure including network switches, routers, wireless networks, security devices, site and building cable plants and related services. In addition, lead the ongoing assessment, standardization, and modification of KCCD's enterprise network infrastructure, network management software and framework, and associated configuration management practices.

#### **REPRESENTATIVE DUTIES:**

Serve as the senior level network management professional supporting core networking infrastructure district wide

Coordinate, prioritize and report on day-to-day reactive and proactive work for KCCD's networking support team

Lead coordination with district office and college IT staff in prioritizing, troubleshooting and resolving networking related support requests in a timely manner

Train appropriate College IT staff on day-to-day and emergency network provisioning and troubleshooting practices

Coordinate and project manage all major upgrades to KCCD's networking infrastructure

Work with IT and Facilities staff to provide input and carry out assigned projects related to district wide construction planning and implementation of networking infrastructure

Automate, innovate and standardize networking hardware, software and support practices to continually improve the effectiveness of IT Network Operations

Research, implement and utilize appropriate network management tools for network monitoring, troubleshooting, traffic prioritization, and usage and uptime reporting

Lead the design, development, documenting and prioritizing of strategies and architecture for meeting KCCD's networking infrastructure needs

Research and implement appropriate network capacity and performance management framework in support of KCCD's networking infrastructure

Develop, document and implement appropriate networking infrastructure standards, policies, and support procedures

Lead efforts to ensure effective cable plant build out, maintenance and documentation for all KCCD sites

Coordinate and lead effective patching and anti-virus practices for workstation and servers district wide

Research and implement IT security measures and solutions required to keep KCCD's networking infrastructure secure

Implement and maintain backup and disaster recovery plans for District Wide networking services

Maintain vendor contacts, partnerships and relationships related to the implementation and support of KCCD's networking infrastructure

Develop and maintain Help Desk Knowledge Base articles for respective areas of responsibility

Maintain accurate inventory and replacement planning information for networking infrastructure district wide

Develop and maintain documentation for KCCD's networking infrastructure

Identify, recommend and implement changes to support processes that need improvement

Receive, prioritize and respond to Help Desk service tickets for LAN/WAN related issues

Manage hardware and software support contracts required to effectively support KCCD's networking infrastructure

Backup other network team members on as needed basis in the support of KCCD's networking infrastructure

Keep current with the latest developments in networking technologies

Prepare budget recommendations, cost estimates and justifications for networking infrastructure

Develop and maintain budget to support KCCD's networking infrastructure

Perform related duties as assigned

## **KNOWLEDGE AND ABILITIES:**

### **KNOWLEDGE OF:**

- Ethernet, TCP/IP, IPV4, IPV6
- Network performance monitoring, capacity planning and methodologies
- Network management systems
- Packet capture and analysis
- Installation, configuration and management of network infrastructure including routers, switches and wireless networks.
- Extreme Networks and Aruba Networks technologies
- Operating systems such as Microsoft Windows XP, Windows 7, and Windows 2003/2008 server
- IP addressing and subnetting practices
- Remote Access technologies (i.e. Citrix)
- Network management industry best practices
- Network troubleshooting and problem resolution
- Cabling standards, methods and procedures
- Principles of effective project management.
- Traffic prioritization and management concepts such as QOS, bandwidth shaping and bandwidth compression and bandwidth acceleration
- Budget management principles
- Effective customer service skills and practices

### **ABILITY TO:**

- Plan, organize, coordinate and implement LAN related projects
- Manage a wide array of networking infrastructure
- Effectively interact and negotiate with vendors
- Effectively prioritize and execute projects
- Effectively participate in working groups or committees
- Prepare and follow work plans and time lines for projects and proposed systems
- Learn new skills and adapt to changes in technology
- Continuously update personal knowledge of industry-leading LAN technology
- Communicate effectively both orally and in writing
- Establish and maintain cooperative and effective working relationships with others

## **EDUCATION AND EXPERIENCE:**

Any combination equivalent to: Associate's degree in Computer Science or related field and 5 years of increasingly responsible network support experience including 2 years in a team lead role.

**OR**

High school diploma, GED or equivalent certificate of competency and 7 years of work experience such as described in the representative duties section of the specification.

**OR**

A Bachelor's degree in a related field of study and 3 years of work experience such as described in the representative duties section of the specification.

Preferred: At least 3 years experience with Extreme Networks, Aruba Networks, cabling infrastructure and IT Security in a multi-site environment.

**WORKING CONDITIONS:**

**ENVIRONMENT:**

Office environment.

Driving a vehicle to conduct work

**PHYSICAL DEMANDS:**

Incorporated within one or more of the previously mentioned essential functions of this job description are essential physical requirements. The chart below indicates the percentage of time spent on each of the following essential physical requirements.

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|----------------------------------|---|
| 1. Seldom = Less than 25 percent | 3. Often = 51-75 percent                |
| 2. Occasional = 25-50 percent    | 4. Very Frequent = 76 percent and above |

- 4 a. Ability to work at a desk, conference table or in meetings of various configurations.
- 2 b. Ability to stand for extended periods of time.
- 4 c. Ability to sit for extended periods of time.
- 4 d. Ability to see for purposes of reading printed matter.
- 2 e. Ability to hear and understand speech at normal levels.
- 4 f. Ability to communicate so others will be able to clearly understand a normal conversation.
- 2 g. Ability to bend and twist.
- 2 h. Ability to lift 25 lbs.
- 2 i. Ability to carry 25 lbs.
- 4 j. Ability to operate office equipment, computer or related peripherals.
- 3 k. Ability to reach in all directions.

*This job description is intended to describe the general nature and level of work being performed. It is not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of individuals so classified.*